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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,973	05/30/2001	Ronald Paul Rohrbach	H0001202	8302

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EXAMINER

CINTINS, IVARS C

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/867,973	Applicant(s) ROHRBACH ET AL.	
	Examiner Ivars C. Cintins	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5-10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brownawell et al. (U.S. Patent No. 5,069,799; hereinafter "Brownawell '799"). Brownawell '799 discloses an oil filter comprising a hollow housing having an inlet and an outlet, a mechanically active filter member (i.e. "inactive filter media" 12) disposed inside the housing, and a chemically active filter member (i.e. 14) disposed inside this housing. This reference further discloses an embodiment (see Fig. 2) having a supplemental cartridge with a chemically active filter member (i.e. 30) disposed therein. The chemically active filter member includes a plurality of particles (see col. 2, line 6) containing a beneficial additive such as a basic salt of the type recited (see col. 2, lines 12-17). Accordingly, this reference discloses the claimed invention with the exception of the diameter of the particles in the chemically active filter member (claims 1, 2 and 5-10), and the percentage of additive in these particles (claim 18). However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ particles having the recited diameter in the reference system, in order to facilitate handling of the treatment material in this reference system. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the recited amount of beneficial additive in the reference particles, in order to ensure that a sufficient amount of additive is present in these particles to adequately rejuvenate the oil undergoing treatment.

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Claims 3, 13-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brownawell '799 as applied above, and further in view of DeJovine (U.S. Patent No. 4,144,166). Brownawell '799 as modified above discloses the claimed invention with the exception of the recited polymeric binder (claim 3), and the presence of an antioxidant as the beneficial agent (claims 13-15 and 17). DeJovine discloses a similar oil filter, and teaches supporting an oil additive material such as calcium carbonate or calcium hydroxide (see col. 11, lines 57-58) with a polymeric material of the type recited (see col. 3, line 20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the polyolefin of DeJovine as the "polymer matrix" of Brownawell '799 (see col. 2, line 2), since this polyolefin is capable of supporting the calcium carbonate or calcium hydroxide of this primary reference (see col. 2, lines 12-13) in the required manner. Also, this secondary reference teaches that antioxidants of the type recited can be employed as additives for lubricating oil (see col. 11, lines 41-43 and 48-53); and it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the antioxidants disclosed by DeJovine into the chemically active filter member of Brownawell '799, in order to inhibit oxidation of the oil undergoing treatment in this modified primary reference system.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brownawell '799 as applied above, and further in view of Bilski et al. (U.S. Patent No. 5,725,031; hereinafter "Bilski"). Brownawell '799 as modified above discloses the claimed invention with the exception of the recited location of the chemically active filter element with respect to the mechanically active filter element. Bilski discloses a similar oil filter containing both a mechanically active filter element and means for adding a chemical to oil undergoing treatment,

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and further discloses (see Fig. 1) locating the chemical adding element radially and coaxially inside the mechanically active filter element. It would have been obvious to one of ordinary skill in the art at the time the invention was made to locate the chemically active filter element (i.e. 14) of Brownawell '799 inside the mechanically active filter element (i.e. 12), as suggested by Bilski, in order to produce a more compact filtration and treatment device.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brownawell '799 and DeJovine as applied above, and further in view of Robers et al. (U.S. Patent No. 5,544,699; hereinafter "Robers"). The modified primary reference discloses the claimed invention with the exception of the recited auxiliary inlet and outlet tubes. Robers discloses an oil filter having auxiliary inlet and outlet tubes (42 and 44), in order to cool the oil in the system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of the modified primary reference with the cooling arrangement of Robers, in order to obtain the advantages disclosed by this secondary reference for the system of the modified primary reference.

Applicant's arguments filed December 8, 2005 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that Brownawell '799 discloses pellets which can be cylindrical or spherical, and that it would be recognized by those skilled in the art that cylindrical particles would not provide the necessary interstitial spaces. It is pointed out, however, that a group of particles having any shape, be it spherical or cylindrical, will inherently have some interstitial space between adjacent particles; and this is all that is required by claim 1.

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As for the particle size recitation contained in claims 1, 7 and 13, Applicant should note that the particles in the chemically active filter member of Brownawell '799 must inherently have some average diameter; and that one of ordinary skill in the oil treatment art would readily recognize that particles having an average diameter significantly below 0.1 millimeters could cause handling problems in the reference device, since powders are more difficult to handle than are larger granules; and would further recognize that particles having an average diameter significantly above 6 millimeters could cause problems in the reference device, since the interstitial space between these particles could be too great to produce adequate contact between the chemically active media and the oil undergoing treatment. Accordingly, this skilled artisan would have been motivated to select particles having an average diameter within the recited range, in order to avoid the above noted problems.

As for the additive percentage recitation contained in claim 18, Applicant should note that the particles in the chemically active filter member of Brownawell '799 must inherently have some percentage of beneficial additive; and that one of ordinary skill in the oil treatment art would readily recognize that particles having a greater concentration of beneficial additive would be more efficient in treating oil than would particles having a lesser concentration of this additive. Accordingly, this skilled artisan would have been motivated to employ particles having the recited percentage of beneficial additive in the reference device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If

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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
March 8, 2006